

Utilizing Online Table-Top Roleplaying Games to Build Resilience and Coping Skills in  
LGBTQ+ Youth

Honors Research Thesis

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by

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### **Abstract**

Lesbian, gay, bisexual, transgender, queer, questioning, and other sexual and/or gender minority (LGBTQ+) adolescents are at increased risk for mental health issues as a result of the stressors they are exposed to due to their LGBTQ+ identities. This stress—resulting from factors such as prejudice; individual, interpersonal, and institutional discrimination; and microaggressions—can also have negative effects on their overall wellbeing. This pilot feasibility and evaluation study adapted a table-top roleplaying game (similar to Dungeons and Dragons) to fit themes relative to the struggles of LGBTQ+ youth in an online format. The game magnifies and personifies themes like anxiety, depression, internalized stigma, and discrimination (both interpersonal and structural). Players collectively learn and implement relevant coping mechanisms to overcome these challenges. The study found that adapting an LGBTQ+ focused table-top roleplaying game to an online format was feasible and acceptable to participants and that the game is effective at its objectives, indicating significant changes for most outcomes of interest; results indicate that resilience and coping skills increased while risk factors decreased. While more research is needed to validate preliminary outcomes, this pilot study confirmed the potential for online table-top roleplaying games to reach a wide audience and help reduce risk factors while building resilience and coping skills in minoritized adolescent populations.

*Key Words:* anxiety, coping skills, depression, discrimination, internalized stigma, LGBTQ+, table-top roleplaying game, resilience

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## **Chapter I: Statement of the Problem**

This study sought to measure the feasibility and acceptability of online delivery of a lesbian, gay, bisexual, transgender, queer, questioning, and other sexual and/or gender minority (LGBTQ+) focused table-top roleplaying game to (1) increase resilience and coping skills; and (2) decrease risk factors such as anxiety, depression, perceived discrimination, and internalized stigma in LGBTQ+ youth.

### **Conceptual Frame of Reference**

The first guiding concept for this study is minority stress theory. Minority stress itself is based on two premises: (1) that stigma directed towards the minoritized population creates unique stressors, and (2) that these stressors can negatively impact both the mental and physical health of minoritized individuals and communities (Meyer, 2015). Thus, minority stress theory proposes that mental and physical health disparities in minoritized populations result from external factors directed at an individual implicitly or explicitly because of their minoritized status (Lefevor et al., 2019).

This theory has been used to explain the elevated rates of mental health problems in the LGBTQ+ community. LGBTQ+ individuals experience unique stressors including “fear of further victimization or discrimination and mistrust of others, internalized negative beliefs about one’s identity (often called ‘internalized homophobia’), and the stress of concealing one’s identity” (Heck, 2015; Meyer, 1995; Testa et al., p. 65, 2015). These stressors are primarily associated with the LGBTQ+ population and emerge specifically because of an individual’s sexual orientation and/or gender identity (Heck, 2015).

Using this framework, it is reasonable to say that LGBTQ+ youth experiencing stressors related to their LGBTQ+ identities are at an increased risk for mental health related issues like anxiety and depression (Dürrbaum & Sattler, 2020; Lefevor et al., 2019; Marks et al., 2020). The

external stressors LGBTQ+ youth experience come from a multitude of contexts including home, school, work, and community (Marks et al., 2020). They are subjected to discrimination and victimization due to their LGBTQ+ identities at school and experience the stress of having unsupportive or hostile family members at home; because youth have little freedom to change their environment, these compounding experiences of risk exposure can become increasingly harmful (Mallory et al., 2017). Minority stress theory reinforces the idea that new, alternative solutions must be found to help mitigate this risk.

In addition, a risk and resilience perspective is also used as a secondary guiding concept for this study. Risk is any internal or external factor that can harm an individual's well-being. The minority stressors discussed above pose a significant risks to LGBTQ+ youth (Meyer, 1995; Rivers et al., 2018) who face an onslaught of risk factors that can have a negative effect on their mental health and overall wellbeing (Rivers et al., 2018)..

However, while it is important to recognize that LGBTQ+ youth face many adversities, most individuals thrive despite these challenges; and this resilience is one of the many strengths of the LGBTQ+ community. Resilience has been defined as the adaptation to and surmounting of stress or hardship, and cultivating resilience can help youth to overcome risks they encounter in their daily lives (Marks et al., 2020). Resilience is most frequently measured in terms of its effect on health; in other words, an individual would be considered to possess a high degree of resilience if they withstood stressors they encountered and remained mentally and physically healthy (Meyer, 2015). There are multiple ways in which resilience is fostered, including through community interaction and acceptance, and through the repetitive use of healthy coping skills (Marks et al., 2020). Focusing on building resilience can help protect the LGBTQ+ community from minority stress and make a long-term, sustainable impact (Colpitts & Gahagan, 2016).

While resilience is made visible through its influence on outcomes (e.g., health and mental health), coping skills are a conscious effort in response to a stressor which may or may not be successful (Craig et al., 2018; Meyer, 2015). Coping is an important resource employed by LGBTQ+ youth to confront and mitigate the risks and harms they encounter on a daily basis (Craig et al., 2018). While coping skills can be helpful (positive or adaptive) and harmful (negative or maladaptive), healthy coping skills increase resilience and can therefore help LGBTQ+ youth overcome stressors (Meyer, 2015). Interventions that seek to teach coping skills and build resilience can be especially impactful within the LGBTQ+ community.

### **Definitions of Terms**

#### ***Anxiety***

Anxiety is the feeling of unease or anxiousness that is out of proportion to the perceived threat. Anxiety may include physical symptoms such as irritability, inability to focus, trouble sleeping, and restlessness. Feelings of anxiety are experienced by a large portion of the population but are increasingly prevalent in minoritized groups of people such as people of color and the LGBTQ+ community (Reisner et al., 2015).

#### ***Coping Skills***

Coping skills are ways in which individuals can deal with or manage internal or external challenges with some degree of success. Coping skills can be positive or negative and, while these skills may help the individual manage the problem, they do not actively resolve the problem at hand (Magson et al., 2021).

#### ***Depression***

Depression includes feelings of sadness or hopelessness that pervade for an extended period of time. This may result in loss of interest, lack of motivation, feelings of worthlessness,

and other emotional or physical issues that decrease an individual's ability to function. Like anxiety, feelings of depression are experienced by a large portion of minoritized populations (Reisner et al., 2015).

### ***Discrimination***

Discrimination can be described as public or private policies put in place by the dominant culture or group that act as barriers to opportunities and limit the success of a minoritized population (Price-Feeney et al., 2020).

### ***Internalized Stigma***

Internalized stigma is a self-applied negative stereotype that has been learned and absorbed as a result of external factors such as social norms and exposure to harmful prejudice or interpersonal discrimination like verbal or physical abuse, rudeness, refusing service or purposefully providing unsatisfactory service, and exclusion. This includes but is not limited to internalized homophobia and transphobia and has been shown to have a negative impact on an individual's mental health (Marks et al., 2020). Internalized stigma can result from LGBTQ+ phobia and other prejudice or discrimination that is aimed toward sexual minorities, transgender, and gender nonconforming people.

### ***Resilience***

Resilience is the ability for an individual to overcome obstacles or deal with the challenges they may face, as well as their ability to recover from failure. Internalized feelings of value and self-worth an individual experiences also increases their resilience. These factors, in tandem with coping skills, can help predict how an individual may act when facing adversity (Marks et al., 2020).

## **Background of the Problem**

As discussed, the increased stress exposure resulting from stigma is a substantial contributing factor to the disproportionate mental health problems LGBTQ+ youth face (Testa et al., 2015). This stress can also result from factors such as prejudice, discrimination, or microaggressions. Microaggressions are defined as sporadic but common “verbal, behavioral, or environmental indignities...intentional or unintentional, that communicate hostile, derogatory, or negative slights and insults toward[s]” (Nadal et al., 2011, p. 235) individuals from marginalized communities (Cyrus, 2017). Several studies have found that perceived discrimination—on both an individual and institutional level—strongly correlates to mental health difficulties (Mallory et al., 2017.). LGBTQ+ youth are at risk for discrimination within their schools and communities, especially if their sexual orientation and/or gender identity is unaccepted or unwelcomed within their culture or context. Other studies link psychological distress, depression, and other health related behaviors to microaggressions (Lefevor et al., 2019; Mallory et al., 2017; Nadal et al., 2011).

LGBTQ+ youth suffer from depression more commonly than other general mental health problems. This is most likely due to the minority stress adolescents encounter because of their LGBTQ+ identities (Dürrbaum & Sattler, 2020). In 2015, the Centers for Disease Control (CDC) issued a national study for the United States that analyzed the health-related behaviors and statuses of sexual minority students compared to their heterosexual, cisgender peers. The study reported hopelessness and loss of interest (common symptoms of depression) in 26.4% of heterosexual students, but also in 60.4% of LGB students (Kann, 2016). Further, 46.5% of questioning students had felt so sad or helpless almost every day for two or more weeks in a row that they stopped doing some usual activities (Kann, 2016). Almost twice as many LGBTQ+



youth had experienced this hopelessness as their cisgender, heterosexual peers; and it had a major impact in the lives of almost half of these young people.

While depression is most common, Wadsworth and Hayes-Skelton (2015) found that individuals who self-identified as LGBTQ+ experienced higher levels of anxiety resulting from lacking social supports and community rejection. It is important to note that transgender youth have been found to be even more susceptible to mental health issues than their cisgender LGB peers. Reisner's (2015) study on transgender youth, found a high prevalence of depression, anxiety, and suicidal ideation within the population. In addition to mental health related risks, LGBTQ+ youth must contend with potential prejudice and discrimination, which in turn impacts the overall wellbeing of the community (Price-Feeney et al., 2020).

In addition, risk factors such as social isolation during the COVID-19 pandemic can also increase youths' susceptibility to mental health related issues. Being socially isolated for an extended period has had a negative effect on adolescents' mental health, including a significant increase in depressive symptoms and anxiety (Magson et al., 2021). Additionally, the pandemic has significantly restricted mental health and mental health services for minoritized populations, including LGBTQ+ youth. Simultaneously, many LGBTQ+ youth have identified that being quarantined at home with unsupportive family members and isolated from the LGBTQ+ community has been harmful to their mental health (Fish et al., 2020; Pacey et al., 2021). Many have expressed the need for validation and connectedness to queer communities during this time in isolation (Pacey et al., 2021). The pandemic has especially affected youth who primarily rely on their peers for social interaction and support. Throughout the pandemic, mental health professionals have had to find new, innovative, and accessible ways to disseminate resources to

marginalized populations, including ways to ensure LGBTQ+ youth access to affirming and supportive communities online (Fish et al., 2020; Sevelius et al., 2020).

### **Purpose of the Study**

This study sought to measure via a pre-experimental, one-group pre-test/post-test, as well as qualitative follow-up interviews, the feasibility and acceptability of (1) modifying a table-top roleplaying game (similar to Dungeons and Dragons) with themes relative to the struggles of LGBTQ+ youth and (2) adapting it to an online format. These modifications aimed to increase participants' resilience and coping to reduce their risks. The game was piloted with a group ( $n = 14$ ) of adolescents (aged 15 –18) who self-identified as LGBTQ+ via online video-calling platform Zoom. The game magnified and personified themes like anxiety, depression, internalized stigma, and discrimination (both interpersonal and structural) so that participants could collectively learn how to use relevant coping mechanisms to overcome these challenges. The intent was that participants would then apply their learning during the game to their daily lives, helping them to combat the challenges they encounter. The study determined how relevant the use of role-playing games delivered online may be in psychoeducational or therapeutic settings with LGBTQ+ youth and helped to identify more areas of potential study.

### **Aims and Research Questions**

This study aimed to adapt an LGBTQ+ focused table-top roleplaying game, entitled “Demons Dreamt: Shadow of Drusilla,” (i.e., Demons Dreamt) to an online format in the hopes of increasing resilience and coping skills of participants and decreasing risk factors like anxiety, depression, perceived discrimination, and internalized stigma. The study's research questions included:

1. Is it feasible to adapt the game and present it in an online format?

2. How effective is the game as an intervention for achieving its aims?
3. Is the intervention acceptable and well-liked by the participants?

## **Chapter II: Review of the Literature**

Despite increased exposure to stigma, discrimination, and hostility, most members of the LGBTQ+ community successfully overcome these challenges (Marks et al., 2020; Meyer, 2015). According to Magson and colleagues, (2021) resilience enables people to thrive in spite of the adversity that they may face. Resilience can incorporate many aspects of an individual's life and can be developed over time. For example, Rivers and colleagues (2018) note that resilience can be fostered through community engagement and finding means to share experiences to encourage a sense of belonging. This resilience can in turn be strengthened with healthy coping skills and other protective factors. Understanding how such factors can prevent and mitigate risk exposure in LGBTQ+ youth can help researchers develop new and innovative interventions (Marks et al., 2020).

In addition to resilience, coping skills help LGBTQ+ face and overcome the challenges and stress that come with their identity. Some coping skills can be positive and have a helpful effect on one's well-being, while others may be negative and have a harmful effect. While some coping skills are not necessarily positive, the goal of coping is to somehow manage the stress that is being felt to prevent even worse outcomes (Heck, 2015). Ideally, healthy coping strategies like distraction and cognitive reframing are used by LGBTQ+ youth to help deal with stressors, while harmful coping strategies like substance misuse or lashing out are avoided. This, however, can depend on the individual's knowledge of healthy coping skills and their degree of past success and support in using those skills (Craig et al., 2018).

There have been multiple studies investigating how to build resilience and coping skills in minoritized youth. The Identity Project created by Rivas-Drake and Umaña Taylor (2019) sought to use identity exploration and affirmation in ethno-racial minority youth to build

resilience and combat the effects of discrimination. Additionally, Craig and colleagues (2018) created a cognitive-behavioral therapy-based coping skills training for LGBTQ+ youth and found that the intervention helped youth engage in healthy coping strategies. These interventions and others have established the groundwork for building coping skills and resilience in minoritized youth.

Specific LGBTQ+ group interventions, like the transgender resilience intervention model (TRIM), have used this foundation to help guide their interventions. TRIM prioritizes community belonging, positive role-models, and other group-level resilience factors to mitigate minority stress (Matsuno & Israel, 2018). Other similar group-level interventions like Hatch Youth found success in increased social supports for LGBTQ+ youth (Wilkerson et al., 2017). These interventions suggest that building resilience through accepting and affirming social environments can help LGBTQ+ youth face the challenges that come with their minoritized identity. While these interventions indicate successful outcomes, there is still need for more resilience- and coping-based group-level interventions—especially during the COVID-19 pandemic.

Online psychoeducation interventions teach coping skills as well as provide an alternative solution to overcome the challenges that stem from COVID-19 and the resulting limited social interaction. Psychoeducation groups focus on providing information to help develop awareness and skills within the target population—including, according to Burnes and Hovanesian (2017), “teaching and education about how to cope with...societal oppressions” (p. 120). Additionally, using psychoeducation in an online format can help overcome access barriers and encourage those who are otherwise reluctant to seek help. Online psychoeducation can provide invaluable psychosocial support when it may otherwise be difficult to access (Israel et al., 2019).

Table-top roleplaying games (RPGs) like *Demons Dreamt* utilize social interaction and verbal storytelling to engage players and narrate a story. “Table-top” refers to a type of RPG in which players interact with one another through speech and dialogue, and creatively progress a narrative created by the individual running the game (Daniau, 2016). RPGs have been found to promote creative problem solving and critical thinking skills (Daniau, 2016). These unique aspects of RPGs make them useful to help individuals develop social skills and allows them to encounter challenges they may face in their daily lives and confront these issues in a comparatively safe environment. Because of these factors, RPGs have been found to be useful in therapeutic settings to help individuals overcome trauma or learn social skills (Chaplan-Hoang, 2021; Hawkes-Robinson, 2012).

Additionally, studies demonstrate the usefulness of RPGs in educational environments. Daniau (2016) found RPGs to be “particularly effective to foster knowledge acquisition, develop roleplay skills, strengthen team building, encourage collaborative creativity, and explore one’s personal development” (p. 423) In addition, Spinelli (2018) reported a positive correlation between playing RPGs and creativity in young adults, while Rivers (2016) found “that fantasy role-players report experiencing higher levels of empathic involvement with others” (p. 1).

While the above literature supports the premise for the intervention developed, implemented, and preliminarily evaluated in this study, there is no conclusive evidence that RPGs can help LGBTQ+ youth build resilience and coping. Extant studies point to a correlation between high levels of creativity and empathy in RPG players (Rivers et al., 2016; Spinelli, 2018), but not evidence of the ability of RPGs to build or create these skills. Thus, further research is needed to study the psychoeducational and therapeutic properties of RPGs.

In addition, RPGs can be intimidating to new players as they may be more preoccupied with the rules and mechanics of the game rather than the themes and topics of the overarching story. RPGs require participants to take a significantly more active role than in other forms of media (Rivers et al., 2016). This can be daunting for new players and difficult to manage in tandem with learning the rules of the game. The many facets of RPGs could be a barrier to participants' interaction with the themes in the game and hinder psychoeducational or therapeutic properties of the game if left unaddressed.

### **Chapter Summary**

While scant research exists regarding the use of table-top RPGs to build resilience and coping skills, literature has substantiated that resilience and adaptive coping can decrease mental health related issues in LGBTQ+ youth (Marks et al., 2020; Rivers et al., 2018). Resilience and coping skills can be developed in multiple ways, including via positive interactions within an identity-positive community and among supportive peers. Several group interventions focused on building resilience and coping within minoritized populations already exist (e.g., Matsuno & Israel, 2018; Wilkerson et al., 2017). Additionally, online psychoeducation interventions have had success in building coping skills when other care is inaccessible or unappealing (e.g., Burnes & Hovanesian, 2017; Israel et al., 2019). Finally, table-top RPGs have been proven to help build social skills and foster community, potentially fostering resilience in the target population (Daniau, 2016; Spinelli, 2018).

### **Chapter III: Methodology**

#### **Research Design**

The intervention was designed to aid LGBTQ+ youth in building resilience and coping skills through the adaptation and online implementation of a table-top RPG, “Demons Dreamt.” The table-top RPG sought to better equip youth with the knowledge and skills necessary to improve their mental health and overcome adverse situations specific to sexual and gender minorities. This study took a mixed-methods approach to evaluation, utilizing (1) a pre-test/post-test design and (2) semi-structured post-intervention interviews to assess the feasibility, acceptability, and preliminary effectiveness of the five week-long intervention.

The researcher administered a quantitative survey both before and after the intervention implementation. The pre-intervention survey included the collection of demographic data and administered a series of measures (described below) to assess the participants’ resilience and coping skills, anxiety, depression, perceived discrimination, and internalized stigma. The post-test assessed these same constructs by administering the same measures after the participants had completed “Demons Dreamt.” The semi-structured interview was scheduled with participants immediately after completion of the intervention. Two participants completed the interview, while five others completed a short online survey that posed interview questions due to scheduling difficulties.

#### ***Intervention***

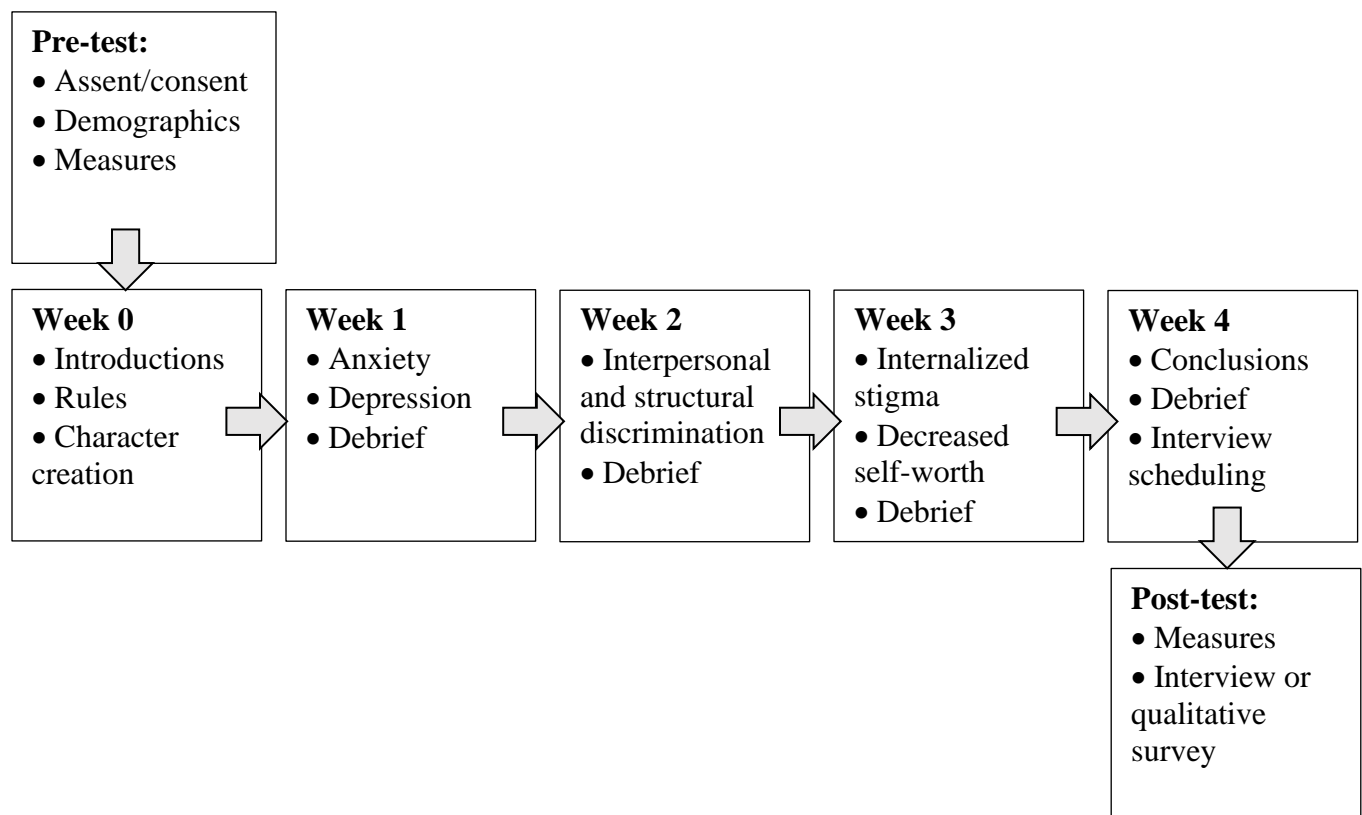
The intervention was comprised of five group meetings over the course of five weeks. The ten participants ( $n = 10$ ) who participated in the game were split into three groups: the first group consisted of four people ( $n = 4$ ) while the remaining two groups were each comprised of three people ( $n = 3$ ). Participants were grouped based on scheduling availability, and the



intervention groups ran from February 6<sup>th</sup>, 2021 to March 8<sup>th</sup>, 2021. The first meeting of the intervention (Week 0) was an introductory meeting where participants got to know one another, and the researcher explained the rules of the game. Each of the subsequent four meetings (Weeks 1 – 4) were three hours long, in which 2.5 hours were devoted to gameplay and 0.5 hours were devoted to a short debrief to discuss what happened in the game. The researcher was available for a few minutes after each of the meetings to talk one-on-one with participants if they needed to address something outside of the group. The intervention process is outlined in Figure 1.

**Figure 1:**

*Intervention Process, Topics, and Timeline*



**Demons Dreamt: Shadow of Drusilla.**

The intervention delivered was designed based off the “Gardens of Fog” module created by *Take This*—an organization which works to provide mental health support and resources to

the gaming community (Benham, Boccamazzo, & Rose, 2019). The researcher modified the module to fit the LGBTQ+ audience and added two additional chapters to the two from the original game. This extended and modified version, *Demons Dreamt*, was tailored to LGBTQ+ relevant themes and administered to participants. The resulting adventure focused on the group's mutual friend, Jenna, whose mind has been attacked by malevolent forces. The group must enter the comatose Jenna's mind and battle these demons—personified versions of anxiety, depression, and internalized stigma—to save their friend. In addition, players could choose to address interpersonal and structural discrimination outside of Jenna's mind to help her heal.

Each chapter of the game focuses on a different personification. In the first chapter, participants face their own augmented anxieties and Jenna's depressive thoughts. The second chapter introduces interpersonal and structural discrimination Jenna faces and requires participants to find ways to resolve these issues. The final chapter introduces participants to Jenna's internalized stigma, and they must confront the resulting decrease in self-worth Jenna feels. Players must use relevant coping skills, creativity, and teamwork to overcome challenges.

### ***Ethics***

This study was approved by an Ohio State University (OSU) Institutional Review Board Protocol (#2020B0393) and posed no more than minimal risk to participants. Any discomfort they may have experienced during the study was no greater than that participants experience in their daily lives. Additionally, independent assent (for those under eighteen) or consent (for those over eighteen) was required. The decision to seek independent assent (i.e., participation without parental consent) for participants under eighteen was based upon the premise that asking for parental consent could potentially place participants at unnecessary risk for unwilling exposure

of LGBTQ+ status. Participants were required to complete the consent/assent form and meet all inclusion criteria in the demographic survey to gain access to the measures survey.

Participants were encouraged to use pseudonyms; no legal names were collected. Emails were collected and were a potential identifier. However, emails were only sent via a password protected and encrypted OSU email account. All surveys were conducted using Qualtrics, and BuckeyeBox was used to store that data. Participants who partook in an interview were audio-recorded and recordings were stored in BuckeyeBox.

### ***Inclusion Criteria***

For this study, the population was limited to adolescents aged 15 – 18 at the time of screening and was limited to participants who self-identified as LGBTQ+. In addition, participants were required to reside in the United States to simplify the scheduling process. The intervention evaluated in this study focused on the stressors and risk factors that LGBTQ+ youth experience as members of a minoritized population, so ensuring participants met these criteria helped to determine if the intervention was effective.

### ***Recruitment***

The intervention was delivered online, so recruitment also occurred online. This helped the researcher access a larger population; rather than limiting participants to Ohio (in particular, the Columbus area), participants from across the United States were able to access this intervention. Potential participants were recruited primarily through advertisements on social media platforms like Reddit. Advertisements were up and active online from January 31<sup>st</sup>, 2021 to February 3<sup>rd</sup>, 2021 when the researcher confirmed fourteen participants. The researcher then updated the posts to say that they were no longer recruiting. The sampling method for this study was a non-probability voluntary response sample.

### ***Data Collection***

After a participant reached out via the contact information in the recruitment advertisements and expressed interest in participating, they were sent an initial email explaining the project more in depth. This email also included a link to the assent/consent form and the demographic survey. The assent/consent form was designed to end if the participant did not agree to participate, and the demographic survey was designed to end if a participant did not meet eligibility criteria for the study (i.e., the individual was not 15 – 18 years old, did not self-identify as LGBTQ+, or did not reside in the United States). After completion of these data collection tools, participants moved on to the measures survey and an approval checklist for in-game topics. Once these tasks were completed, participants received another email regarding scheduling game sessions, meeting links, and other material distribution.

The intervention was provided to participants over the course of five weeks. After the last week of the intervention, participants were resent the measures survey and asked to schedule their post-intervention interviews. Two participants completed the interviews, while the remaining participants received a qualitative survey administered via Qualtrics.

### **Quantitative**

#### ***Survey Design***

The surveys completed by participants during the study included (1) demographics (pre-test); (2) five measures that individually assessed the participants' resilience and coping skills, anxiety, depression, perceived discrimination, and internalized stigma (pre-test and post-test); and finally (3) a checklist for the approval of in-game topics (pre-test). Demographic items in this study were drawn from a study of LGBTQ+ youth undertaken by McInroy et al. (in preparation) in Spring 2020. Items included state of residence, age, gender identity, sexual

orientation, and race and ethnicity. As outlined above, this survey was structured in Qualtrics to end if a potential participant indicated they did not meet the eligibility criteria (e.g., did not self-identify as LGBTQ+, were under 15 or over 18, or did not live within the United States). Due to scheduling difficulties, an additional post-intervention survey posed (4) two qualitative-short answer questions related to the feasibility and acceptability of the intervention and was sent out in replacement of the virtual post-intervention interviews.

The measures survey included five pre-built scales. Resilience and coping items were drawn from the ten item Connor-Davidson Resilience Scale (CD-RISC-10) created by Connor and Davidson (2003). Anxiety items were drawn from the seven item Generalized Anxiety Disorder Scale (GAD-7) (R. Spitzer et al., 1999). Depression was assessed using the nine item Patient Health Questionnaire Modified for Adolescents (PHQ-9) (Johnson et al., 2002). Measures for perceived discrimination used seven items taken from the Sexual Minority Adolescent Stress Inventory (SMASI) (Schrager et al., 2018). Finally, internalized stigma was assessed using four items adapted from an internalized homophobia scale (Shidlo, 1994).

The checklist for the approval of in-game topics was a modified version of the RPG Consent Checklist created by Reynolds and Germain (2019). The checklist was modified to provide an idea to participants of what might be included in the game, and participants were able to indicate their level of comfort (i.e., include, potentially include, do not include) with the topics that were presented. The checklist also noted which topics were necessary to address within the game (e.g., anxiety, depression, discrimination, etc.) so players understood what to expect. Other topics that participants would potentially encounter included descriptions of demons, paralysis, sexism, and other similar topics. Participants also had the ability to write in any additional topics they did not want included in the game.

**Pre-Test.**

A survey measuring coping and resilience, anxiety and depression, perceived discrimination, and internalized stigma was administered in Qualtrics prior to the intervention and were selected because of their strong validity and reliability. Campbell-Sills and Stein (2007) reported that the CD-RISC-10 exhibited good reliability ( $\alpha = 0.85$ ) as well as excellent construct validity. The internal reliability and consistency of the GAD-7 was also excellent ( $\alpha = 0.92$ ) (Spitzer et al., 2006) and was determined to have solid validity (Mossman et al., 2017). The PHQ-A showed good internal consistency and reliability ( $\alpha = 0.88$ ), along with acceptable validity (Nandakumar et al., 2018). The SMASI demonstrated excellent overall reliability ( $\alpha = 0.98$ ) (Schrager et al., 2018), as well as adequate validity (Goldbach et al., 2017). Finally, the Internalized Homophobia Scale exhibits excellent reliability ( $\alpha = 0.92$ ) and validity (Wagner et al., 1994).

**Post-Test.**

After the intervention, the survey measuring coping and resilience, anxiety and depression, perceived discrimination, and internalized stigma was administered again in a similar manner. The pre-test and post-test were analyzed to determine if statistically significant change had occurred in participants scores on the measures collected.

**Standardized Measures.**

Most questions were single answer multiple choice questions with a “prefer not to answer” option. To measure each of the constructs, previously tested measures were found and added to the survey administered to participants. This study uses the CD-RISC-10 to measure resilience and coping (Connor & Davidson, 2003), the GAD-7 to measure anxiety (R. Spitzer et al., 1999), the PHQ-A to measure depression (Johnson et al., 2002), the modified SMASI to

measure perceived discrimination (Schrager, Goldbach, & Mamey, 2018), and the modified Internalized Homophobia Scale (Shidlo, 1994) to measure internalized stigma.

### ***Survey Delivery***

Because this study was designed to determine the feasibility of adapting this intervention to an online format, the surveys were administered and completed online. In addition, the researcher had access to Qualtrics through The Ohio State University, and subsequently used this software to build the surveys. The pre-intervention survey was administered 1 – 2 weeks prior to the intervention (depending on recruitment), and the post-test was available to participants immediately after completion of the intervention. The semi-structured interview was scheduled with participants immediately after completion of the intervention as well, and those who did not partake in the interview completed the qualitative survey two weeks after the completion of the intervention.

### **Qualitative**

While participants originally agreed to a 15-minute semi-structured interview, due to unexpected circumstances and scheduling challenges, the interview questions were transferred into a short qualitative survey and administered online. The qualitative survey collected data regarding participants' opinion of the intervention's usefulness and acceptability. Once the intervention was completed, participants were sent the final post-intervention measures survey and were asked to schedule a time for the 15-minute semi-structured interview. Two participants completed the interview via Zoom, and the rest of participants were sent the interview questions via a Qualtrics survey. In both cases, participants were asked their opinion on the acceptability and likability of the game and asked if they felt they had gained anything from the intervention: "what, if anything, did you learn from the game?" and "do you think this game could be used to

help other people, and what makes you think it could/could not?” were some of the questions to which participants were asked to respond.

## **Analysis**

### ***Quantitative***

In this study, planned t-tests were used to compare data from the pre-tests and post-tests. Once the data was collected, the researcher ran t-tests in Excel to determine statistical significance and t-test values. Descriptive analyses (e.g., proportion, mean, standard deviation) were used to report the sample demographics.

### ***Qualitative***

Thematic analysis was used to identify and organize themes from the interviews and qualitative surveys (Braun & Clarke, 2008). The researcher conducted interviews with two participants. Once recorded, the researcher transcribed the interviews (with the help of the transcription feature on Zoom).

Once the data were collected, the researcher used thematic analysis to recognize patterns and common topics. While qualitative data cannot be subjected to the same rigors as quantitative data, thematic analysis provides criteria and guidelines to ensure the quality of the research (Braun & Clarke, 2008). The researcher firstly reviewed the transcribed and submitted materials and highlighted the major points participants made during their interviews or in their surveys. Once these comments were highlighted, they were sorted into commonalities; for example, comments like “...relying on others sort of [sic] when it comes to things” and “...willing to have others help me with my problems and concerns” were grouped under the “Fostering Community” theme. Finally, these commonalities were then used as coding schemes to generate



broader themes within the data. These themes were finally named and defined within the context of the data (Braun & Clarke, 2008).

### **Chapter Summary**

This mixed methods study consisted of multiple points of data collection. First, an assent/consent form and a brief demographic survey were given to determine participants' eligibility. Secondly, a pre-intervention survey measuring the relevant constructs was administered. Thirdly an approval of in-game topics checklist gave the researcher an idea of the participants' comfort level with the material. Finally, the post-intervention survey measuring constructs and the interview questions survey were sent to participants to gather the post-intervention data.

## Chapter IV: Results

### Quantitative Data

#### *Sample Size*

The initial study sample consisted of fourteen participants who completed the initial demographic and constructs survey. Only ten of the fourteen participants took part in the pre-intervention and post-intervention surveys. Four of the players decided to leave the study due to other commitments or problems with the meeting schedules, resulting in an attrition rate of 28.6%. Thus, the final analytic sample is composed of the ten individuals who completed both the pre-test and post-test measures.

#### *Sample Demographics*

Participants in the study indicated that they were from twelve different states across the United States, encompassing the West Coast, Rocky Mountain, Gulf Coast, Midwest, and East Coast. In addition, participants ranged from 15 – 18 years old, with an average age of nearly 17 ( $M = 16.7$ ,  $SD = 1.2$ ).

Participants had the opportunity to self-identify as multiple genders and sexualities. However, they were also asked what gender and sexuality they would self-identify as if they could only choose one. The responses to the latter questions are reported below. Three participants self-identified their gender as “man” (21.4%), while two identified as “woman” (14.3%) and two identified as “transgender” (14.3%). The rest of the participants identified as a broad range of genders and the full list is detailed in Table 1. Eight (57.1%) participants identified as transgender or gender diverse. Only five (35.7%) identified as cisgender, with one participant (7.1%) who specified “other.” Regarding sexuality, half of participants identified as

bisexual (50%) while the rest of participants selected a variety of sexualities; please see Table 1 for full responses to the identity characteristics.

**Table 1**

*Demographic Characteristics of Participants*

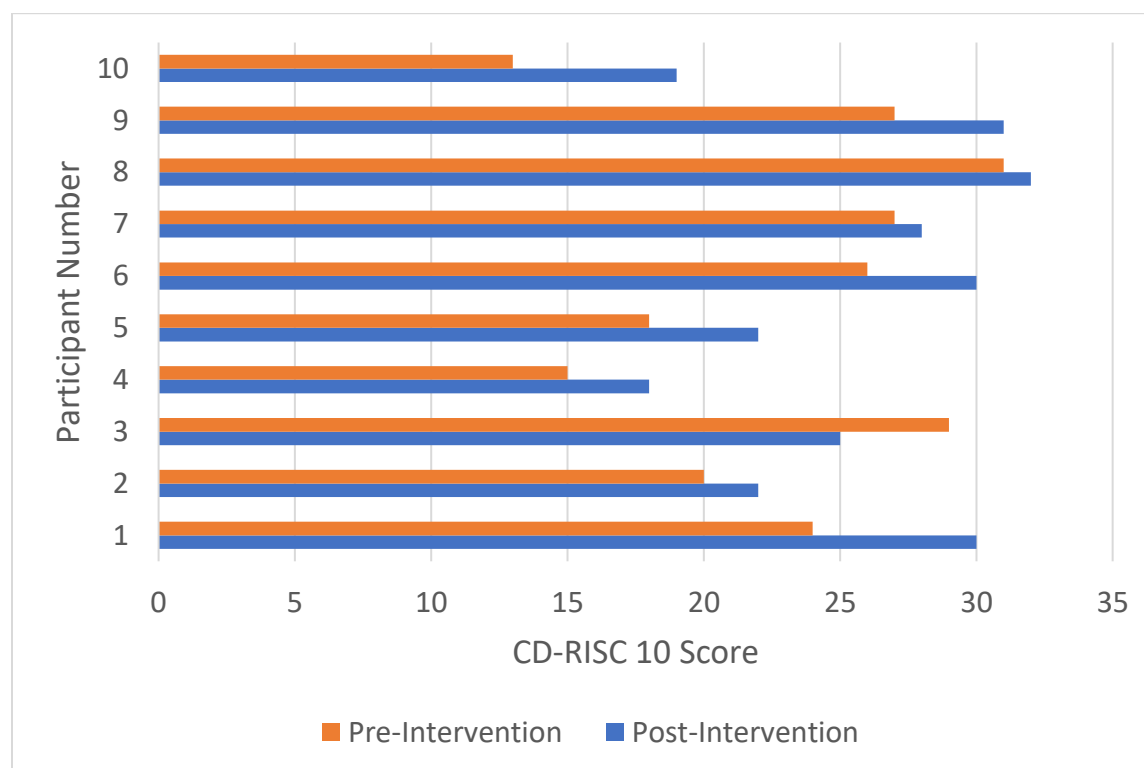
Baseline characteristic	<i>n</i>	%
Gender Identity ( <i>n</i> = 14)		
Man	3	21.4
Woman	2	14.3
Cisgender	1	7.1
Transgender	2	14.3
Genderfluid	1	7.1
Non-binary	2	14.3
Genderqueer	1	7.1
Agender	1	7.1
Prefer not to say	1	7.1
Transgender/gender diverse ( <i>n</i> = 14)		
Yes	8	57.1
No	5	35.7
Other	1	7.1
Sexual Orientation ( <i>n</i> = 14)		
Gay	1	7.1
Lesbian	1	7.1
Bisexual	7	50.0
Asexual	1	7.1
Grey asexual	1	7.1
Pansexual	1	7.1
Panromantic	1	7.1
Queer	1	7.1

***T-Tests***

A paired samples t-test was used to analyze quantitative data from the measures surveys. This type of t-test is used to compare pre- and post-intervention results and determine statistical significance between the two. As mentioned, the final analytic sample for these analyses consisted of ten participants ( $n = 10$ ) who completed the pre-test, the intervention, and the post-test. The cut-off for significance was set at  $p \leq 0.05$ .

***Resilience and Coping Skills***

Paired-samples t-tests were used to measure and compare resilience and coping skills before and after the intervention was delivered. The CD-RISC-10 used to measure resilience and coping asked a series of 10 questions pertaining to flexibility, self-efficacy, optimism, cognitive focus, and emotional regulation. Participants showed a statistically significant difference in their resilience and coping skills scores before ( $M=22.89$ ,  $SD=6.14$ ) and after ( $M=25.22$ ,  $SD=5.9$ ) the intervention;  $t=-2.43$ ,  $p=0.04$ . These results suggests that when youth partook in the intervention, their resilience and coping skills may have increased.

**Figure 2***Measured Resilience and Coping*

**Table 2.1***Resilience and Coping Skills (CD-RISC-10) Responses*

Level of Agreement	Pre-Test		Post-Test	
	<i>n</i>	%	<i>n</i>	%
Flexibility ( <i>n</i> = 10)				
Not true at all	0	0.0	0	0.0
Rarely true	2	20.0	0	0.0
Sometimes true	1	10.0	3	30.0
Often true	5	50.0	5	50.0
True nearly all the time	2	20.0	2	20.0
Self-efficacy ( <i>n</i> = 10)				
Not true at all	0	0.0	0	0.0
Rarely true	2	20.0	1	10.0
Sometimes true	3	30.0	4	40.0
Often true	3	30.0	5	50.0
True nearly all the time	2	20.0	0	0.0
Optimism ( <i>n</i> = 10)				
Not true at all	0	0.0	0	0.0
Rarely true	0	0.0	1	10.0
Sometimes true	4	40.0	0	0.0
Often true	4	40.0	4	40.0
True nearly all the time	2	20.0	5	50.0
Self-efficacy ( <i>n</i> = 10)				
Not true at all	0	0.0	0	0.0
Rarely true	3	30.0	0	0.0
Sometimes true	4	40.0	8	80.0
Often true	2	20.0	2	20.0
True nearly all the time	1	10.0	0	0

**Table 2.2***CD-RISC-10 Responses Continued*

Level of Agreement	Pre-Test		Post-Test	
	<i>n</i>	%	<i>n</i>	%
Flexibility ( <i>n</i> = 10)				
Not true at all	0	0.0	0	0.0
Rarely true	1	10.0	1	10.0
Sometimes true	3	30.0	1	10.0
Often true	4	40.0	7	70.0
True nearly all the time	2	20.0	1	10.0
Optimism ( <i>n</i> = 10)				
Not true at all	0	0.0	0	0.0
Rarely true	2	20.0	0	0.0
Sometimes true	3	30.0	1	10.0
Often true	5	50.0	7	70.0
True nearly all the time	0	0.0	2	20.0
Cognitive Focus ( <i>n</i> = 10)				
Not true at all	1	10.0	0	0.0
Rarely true	3	30.0	2	20.0
Sometimes true	3	30.0	5	50.0
Often true	2	20.0	3	30.0
True nearly all the time	1	10.0	0	0.0
Optimism ( <i>n</i> = 10)				
Not true at all	2	20.0	0	0.0
Rarely true	2	20.0	4	40.0
Sometimes true	6	60.0	3	30.0
Often true	0	0.0	3	30.0
True nearly all the time	0	0.0	0	0.0

**Table 2.3***CD-RISC-10 Responses Continued*

Level of Agreement	Pre-Test		Post-Test	
	<i>n</i>	%	<i>n</i>	%
Self-efficacy ( <i>n</i> = 10)				
Not true at all	1	10.0	1	10.0
Rarely true	2	20.0	2	20.0
Sometimes true	3	30.0	3	30.0
Often true	4	40.0	4	40.0
True nearly all the time	0	0.0	0	0.0
Emotional Regulation ( <i>n</i> = 10)				
Not true at all	0	0.0	0	0.0
Rarely true	1	10.0	1	10.0
Sometimes true	4	40.0	1	10.0
Often true	3	30.0	4	40.0
True nearly all the time	2	20.0	4	40.0

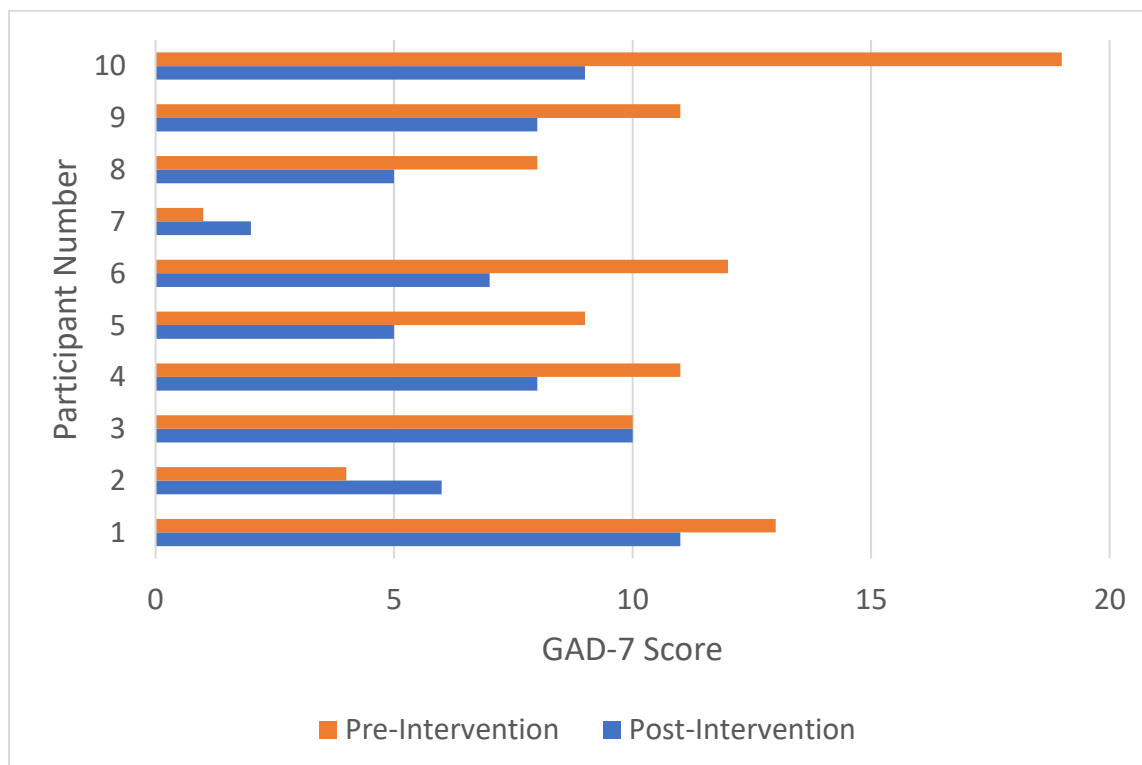


### *Anxiety*

A paired samples t-test was also used to measure participants' anxiety scores before and after the intervention. The GAD-7 listed a series of seven questions about anxious mood, worry, restlessness, and irritability. Participants showed a statistically significant difference in their anxiety before the intervention ( $M=9.44$ ,  $SD=4.92$ ) and after ( $M=6.67$ ,  $SD=2.69$ );  $t=2.31$ ,  $p=0.04$ . This suggests the intervention may have helped to reduce participants' anxiety.

**Figure 3**

#### *Measured Anxiety*



**Table 3.1***Anxiety (GAD-7) Responses*

Level of Occurrence	Pre-Test		Post-Test	
	<i>n</i>	%	<i>n</i>	%
Anxious Mood ( <i>n</i> = 10)				
Not at all	1	10.0	0	0.0
Several days	4	40.0	8	80.0
More than half the days	2	20.0	2	20.0
Nearly every day	3	30.0	0	0.0
Worry ( <i>n</i> = 10)				
Not at all	3	30.0	3	30.0
Several days	4	40.0	6	60.0
More than half the days	1	10.0	1	10.0
Nearly every day	2	20.0	0	0.0
Worry ( <i>n</i> = 10)				
Not at all	0	0.0	2	20.0
Several days	5	50.0	7	70.0
More than half the days	4	40.0	0	0.0
Nearly every day	1	10.0	1	10.0
Restlessness ( <i>n</i> = 10)				
Not at all	1	10.0	1	10.0
Several days	6	60.0	6	60.0
More than half the days	1	10.0	3	30.0
Nearly every day	2	20.0	0	0.0
Restlessness ( <i>n</i> = 10)				
Not at all	4	40.0	3	30.0
Several days	0	0.0	5	50.0
More than half the days	4	40.0	2	20.0
Nearly every day	2	20.0	0	0.0

**Table 3.2***GAD-7 Responses Continued*

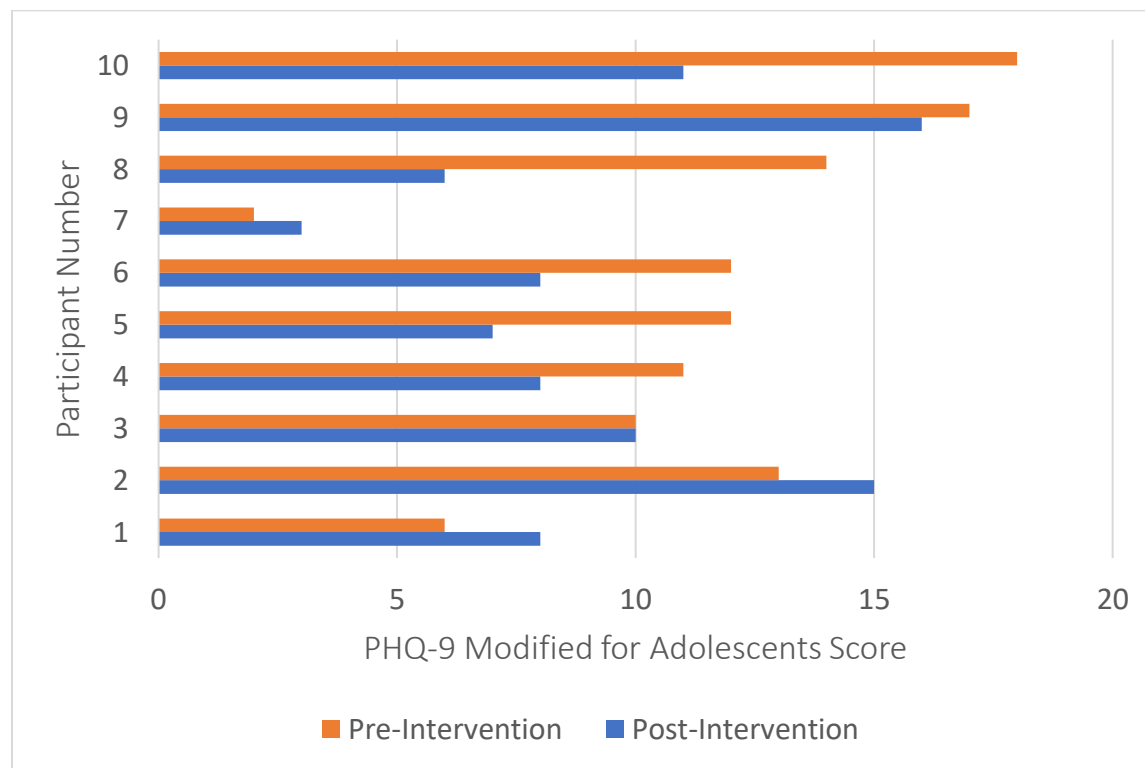
Level of Occurrence	Pre-Test		Post-Test	
	<i>n</i>	%	<i>n</i>	%
Irritability ( <i>n</i> = 10)				
Not at all	2	20.0	1	10.0
Several days	5	50.0	6	60.0
More than half the days	2	20.0	2	20.0
Nearly every day	1	10.0	1	10.0
Worry ( <i>n</i> = 10)				
Not at all	3	30.0	6	60.0
Several days	3	30.0	2	20.0
More than half the days	2	20.0	1	10.0
Nearly every day	2	20.0	1	10.0

### *Depression*

A paired samples t-test was also used to determine how participants' depression scores changed. The PHQ-9 Modified for Adolescents included questions regarding depressed mood, lack of energy, sleep trouble, appetite trouble, lack of focus, and suicidality. A statistically significant difference was found in participants' depression scores before ( $M=12.11$ ,  $SD=4.77$ ) and after the intervention ( $M=9.33$ ,  $SD=3.97$ );  $t=2.36$ ,  $p=0.04$ . These results suggest that when youth played the online game, their depression may have decreased.

**Figure 4**

#### *Measured Depression*



**Table 4.1***Depression (PHQ-A) Responses*

Level of Occurrence	Pre-Test		Post-Test	
	<i>n</i>	%	<i>n</i>	%
Depressed Mood ( <i>n</i> = 10)				
Not at all	2	20.0	3	30.0
Several days	6	60.0	5	50.0
More than half the days	0	0.0	1	10.0
Nearly every day	2	20.0	1	10.0
Lack of Energy ( <i>n</i> = 10)				
Not at all	2	20.0	2	20.0
Several days	2	20.0	4	40.0
More than half the days	6	60.0	3	30.0
Nearly every day	0	0.0	1	10.0
Sleep trouble ( <i>n</i> = 10)				
Not at all	2	20.0	2	20.0
Several days	1	10.0	3	30.0
More than half the days	1	10.0	3	30.0
Nearly every day	6	60.0	2	20.0
Appetite trouble ( <i>n</i> = 10)				
Not at all	1	10.0	3	30.0
Several days	4	40.0	5	50.0
More than half the days	3	30.0	1	10.0
Nearly every day	2	20.0	1	10.0
Lack of energy ( <i>n</i> = 10)				
Not at all	1	10.0	1	10.0
Several days	2	20.0	4	40.0
More than half the days	4	40.0	3	30.0
Nearly every day	3	30.0	2	20.0

**Table 4.2***PHQ-A Responses Continued*

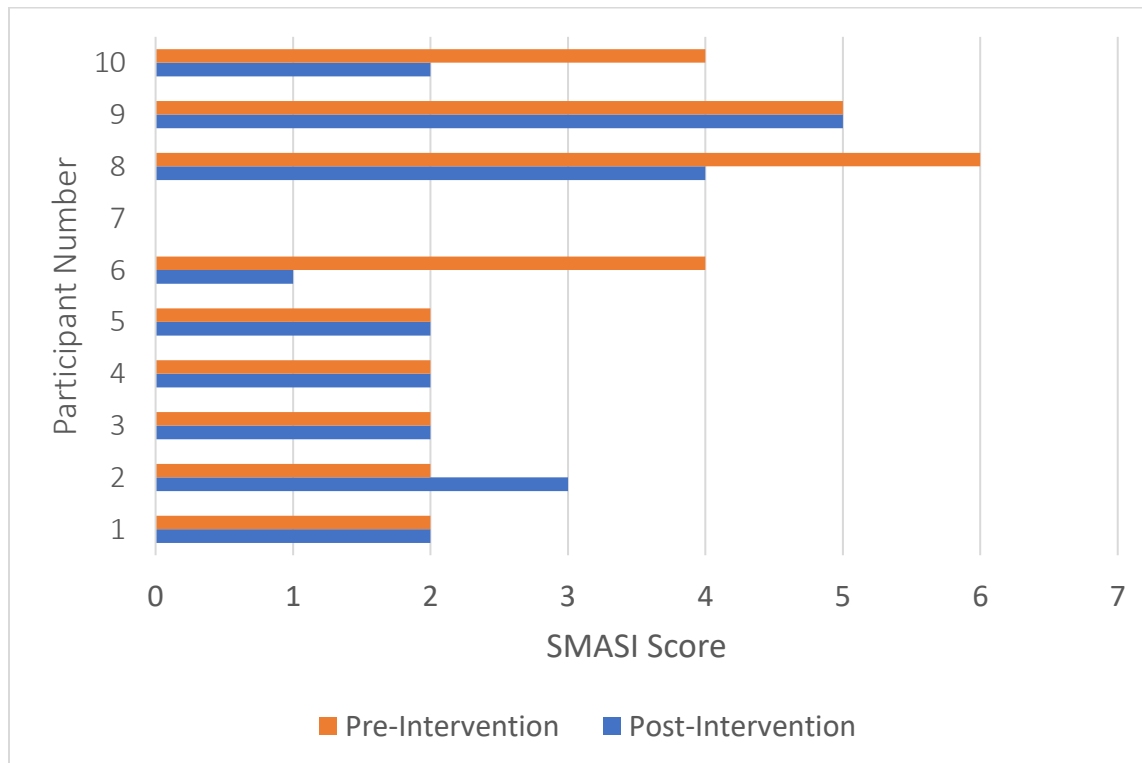
Level of Occurrence	Pre-Test		Post-Test	
	<i>n</i>	%	<i>n</i>	%
Depressed Mood ( <i>n</i> = 10)				
Not at all	1	10.0	2	20.0
Several days	5	50.0	8	80.0
More than half the days	3	30.0	0	0.0
Nearly every day	1	10.0	0	0.0
Lack of focus ( <i>n</i> = 10)				
Not at all	2	20.0	1	10.0
Several days	1	10.0	3	30.0
More than half the days	3	30.0	4	40.0
Nearly every day	4	40.0	2	20.0
Lack of energy ( <i>n</i> = 10)				
Not at all	5	50.0	6	60.0
Several days	3	30.0	3	30.0
More than half the days	1	10.0	1	10.0
Nearly every day	1	10.0	0	0.0
Suicidal thoughts ( <i>n</i> = 10)				
Not at all	7	70.0	10	100.0
Several days	2	20.0	0	0.0
More than half the days	1	10.0	0	0.0
Nearly every day	0	0.0	0	0.0

### *Perceived Discrimination*

A paired samples t-test was used to measure participants' perceived discrimination scores. The SMASI had seven questions that included inquiries about homonegative climate, family rejection, social marginalization, and negative disclosure experiences. Although there was not a statistically significant difference in participants' perceived discrimination scores, the mean scores were trending downward: participants recorded a higher score before the intervention ( $M=3.0$ ,  $SD=1.79$ ) and a lower score after the intervention ( $M=2.33$ ,  $SD=1.42$ );  $t= 1.51$ ,  $p=0.17$ . This is a sign that the intervention may be achieving the desired results even if the difference is not statistically significant.

**Figure 5**

#### *Measured Perceived Discrimination*



**Table 5.1***Perceived Discrimination (Modified SMASI) Responses*

Level of Occurrence	Pre-Test		Post-Test	
	<i>n</i>	%	<i>n</i>	%
Homonegative climate ( <i>n</i> = 10)				
Yes	8	80.0	6	60.0
No	2	20.0	3	30.0
Decline to answer	0	0.0	1	10.0
Family rejection ( <i>n</i> = 10)				
Yes	4	40.0	4	40.0
No	6	60.0	6	60.0
Decline to answer	0	0.0	0	0.0
Social marginalization ( <i>n</i> = 10)				
Yes	4	40.0	4	40.0
No	5	50.0	5	50.0
Decline to answer	1	10.0	1	10.0
Family rejection ( <i>n</i> = 10)				
Yes	2	20.0	3	30.0
No	7	70.0	7	70.0
Decline to answer	1	10.0	0	0.0
Homonegative climate ( <i>n</i> = 10)				
Yes	4	40.0	1	10.0
No	6	60.0	8	80.0
Decline to answer	0	0.0	1	10.0
Negative disclosure experiences ( <i>n</i> = 10)				
Yes	3	30.0	3	30.0
No	7	70.0	7	70.0
Decline to answer	0	0.0	0	0.0



**Table 5.2***Modified SMASI Responses Continued*

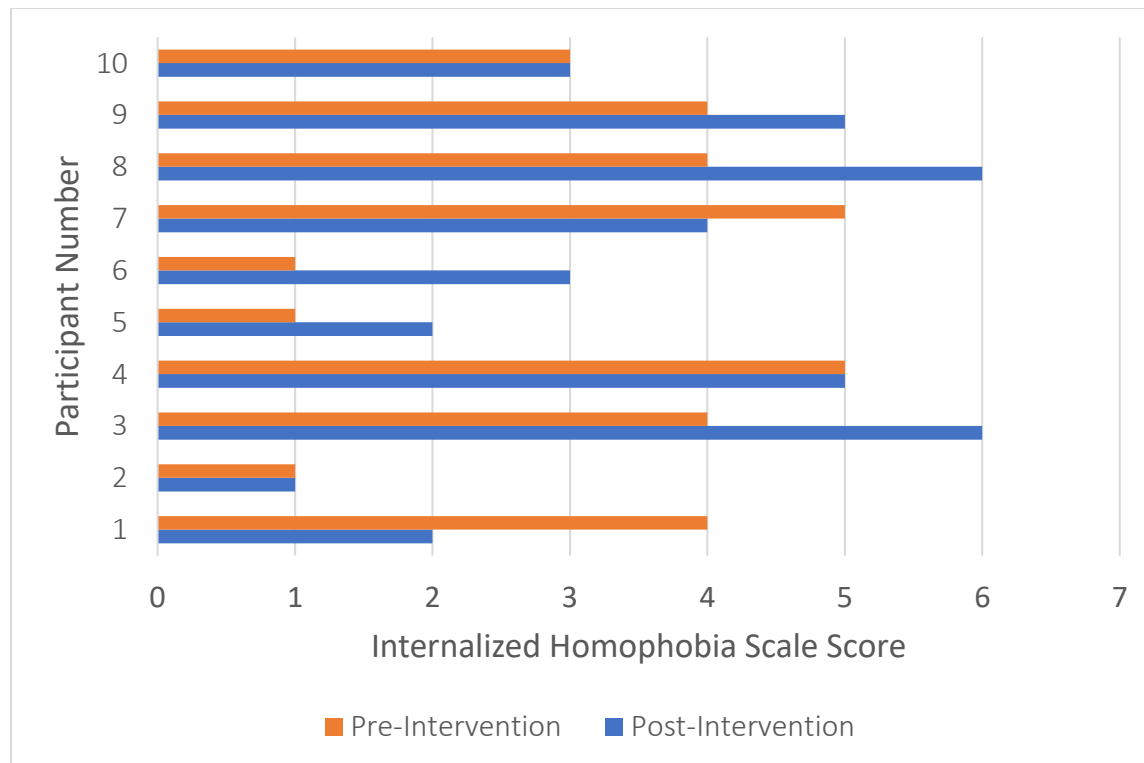
Level of Occurrence	Pre-Test		Post-Test	
	<i>n</i>	%	<i>n</i>	%
Homonegative climate ( <i>n</i> = 10)				
Yes	4	40.0	2	20.0
No	5	50.0	8	80.0
Decline to answer	1	10.0	0	0.0

### *Internalized Stigma*

While a paired samples t-test was also used to measure internalized stigma, the results did not show a statistically significant difference. In fact, internalized stigma increased instead of decreasing as expected. The Internalized Homophobia Scale asked a series of questions about self-criticism and pride in being a part of the LGBTQ+ community. Participants showed a lower score before the intervention ( $M=3.2$ ,  $SD=1.62$ ) and a higher score after the intervention ( $M=3.7$ ,  $SD=1.77$ );  $t=-1.17$ ,  $p=0.27$ . More research would be required to determine why this may be the case.

**Figure 6**

### *Measured Internalized Stigma*



**Table 6***Internalized Stigma (Adapted Internalized Homophobia Scale) Responses*

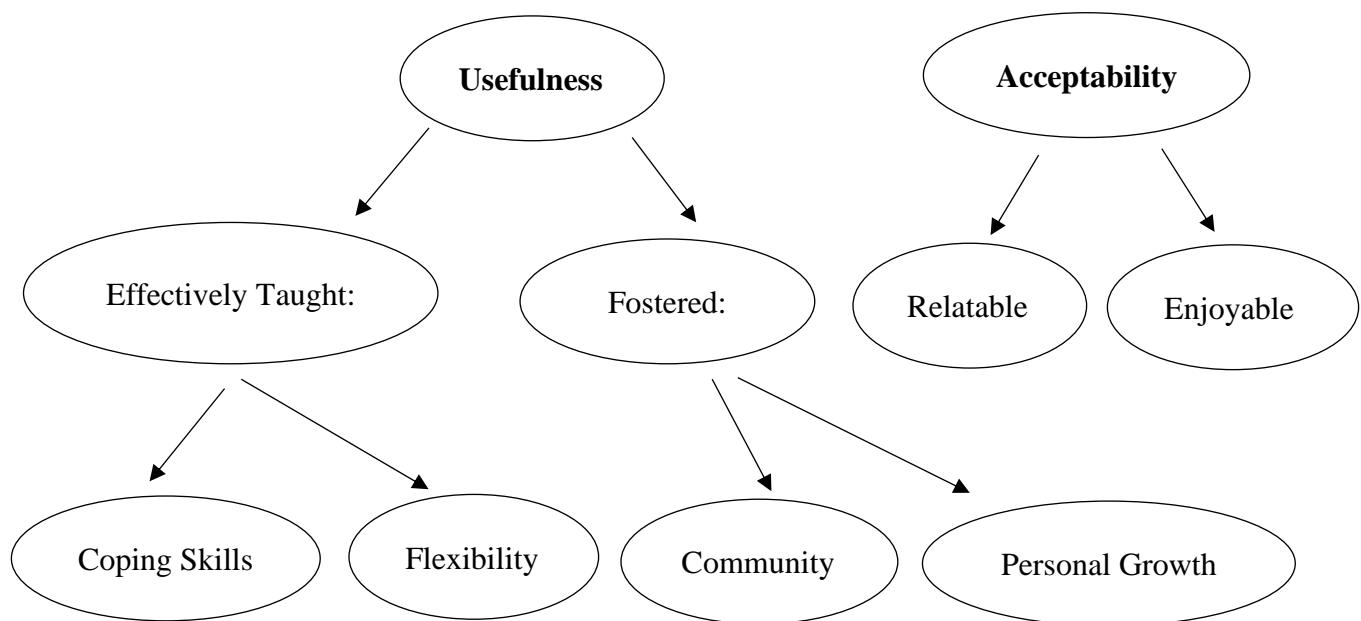
Level of Occurrence	Pre-Test		Post-Test	
	<i>n</i>	%	<i>n</i>	%
Critical of Self ( <i>n</i> = 10)				
Strongly Disagree	2	20.0	0	0.0
Disagree	5	50.0	7	70.0
Agree	2	20.0	1	10.0
Strongly agree	1	10.0	2	20.0
Pride ( <i>n</i> = 10)				
Strongly Disagree	0	0.0	1	10.0
Disagree	1	10.0	0	0.0
Agree	2	20.0	3	30.0
Strongly agree	7	70.0	6	60.0
Critical of Self ( <i>n</i> = 10)				
Strongly Disagree	3	30.0	3	30.0
Disagree	5	50.0	4	40.0
Agree	2	20.0	2	20.0
Strongly agree	0	0.0	1	10.0
Critical of Self ( <i>n</i> = 10)				
Strongly Disagree	4	40.0	6	60.0
Disagree	5	50.0	3	30.0
Agree	1	10.0	1	10.0
Strongly agree	0	0.0	0	0.0

## Qualitative Data

Seven participants completed the qualitative portion of this study (via two interviews and five qualitative surveys). When participants were asked a number of questions about the intervention, thematic analysis was employed to find several common themes amongst the data. Themes were categorized into two broad categories predetermined by the researcher: usefulness and acceptability. The data showed that the participants found the intervention useful in teaching (1) coping skills and (2) flexibility; while also proving useful for fostering (3) community and (4) personal growth. Participants found the intervention acceptable because it was (1) relatable and (2) enjoyable. These themes are depicted in Figure 7 and discussed in further detail below.

**Figure 7**

*Common Themes and Theme Subsets within Qualitative Data*



## *Usefulness*

### **Teaching Coping Skills and Flexibility.**

All seven participants agreed that the intervention could be useful in the future for other LGBTQ+ young people. The majority spoke about the coping skills that were used in the game and how they were relevant to their own lives. Participant 1, who self-identified as cisgender and gray asexual, spoke about some of the mechanics in the game, noting that "...using coping mechanisms for mechanics I think were brilliantly made, and they were all used very well." Additionally, Participant 5, who self-identified as genderqueer and asexual, explained that they "...got to relearn support skills and ways to change my own thinking." Both of these participants acknowledged the coping skills within the game and noted that they were helpful in demonstrating their usefulness. Participant 5 explained that the intervention helped demonstrate and teach coping skills while also strengthening the skills they already had.

Additionally, participants felt that the intervention taught them how to be flexible and how to adapt to situations. For example, Participant 10, who self-identified as non-binary and pansexual stated that "I learned there are many ways to get through something scary." Participant 9, who self-identified as a gay man, supported this notion when he wrote: "...there were some scenarios that could easily happen in the real world, and being able to roleplay it in a fantasy world gave me the chance to sort of ease into it." Using the roleplay aspect of table-top RPGs gave participants the room to find creative solutions and teach them how to be flexible under strenuous circumstances.

### **Fostering Community and Personal Growth.**

Many of the participants in this study also pointed out that building relationships and community within their groups was an important and useful aspect of the intervention.

Participant 2, who self-identified as transgender and bisexual, explained that:

““...we [had] to help each other through various obstacles and stuff. So, I’m talking about talking to people in the town and, like, asking them to help Jenna through her own crisis.

I feel like help and relying on other people, that sort of camaraderie is what was the most prevalent theme in the entire game.”

Other participants expressed this same notion. Participant 1 mentioned similar themes and stated that he was “willing to have others help [him] with [his] problems and concerns” throughout the intervention. The data suggests that the intervention fostered community and interpersonal relationships.

In addition, multiple participants spoke about building their resilience in terms of their personal growth. For example, Participant 10 said: “[p]atience, coping, and bravery were some of the virtues I learned and grew within the game. Playing with those who I enjoyed but maybe would not have chose [sic] gave me an incredible amount of patience and because of that I was able to become friends with people I may not have been able to before.” This participant explained that the intervention was useful in helping them develop qualities like patience and encouraged them to make friends through playing the game.

### ***Acceptability***

#### **Relatable.**

Many participants mentioned that the game was acceptable to them because it was relatable. Participant 4, who self-identified as genderfluid and bisexual, stated that “[this] is the type of game that lets players explore themselves and face any issues they may encounter within

themselves. It's really helpful in so many ways." The intervention's ability to connect with and incorporate the target audience increases the likelihood for the game to be highly acceptable to a wide variety of LGBTQ+ youth. Additionally, a number of participants also recognized that a lot of the scenarios they encountered in the game were similar to those they had experienced in their own lives. For example, Participant 5 noted that:

It [the game] featured dealing with many things that I know have hit me in my worse days as a very depressed younger teen. I had to be partially hospitalized after a near suicidal episode in my sophomore year, in which I basically had nothing but a school-type experience centered upon coping mechanisms and therapy. A lot of this stuff would fit right in, and would be more fun than our actual lesson time. In fact, some of Jenna's quotes were nearly word for word things I've thought myself. It was kinda startling.

This participant notes that many of the takeaways from the game were the same things they learned during their time in the hospital. The relatability of this intervention helps engage the participants and ensures that what they take away from the intervention is useful and applicable to their daily lives.

### **Enjoyable.**

The data also suggested that the intervention was acceptable because it was fun. Almost every participant mentioned having fun within the game or enjoying some aspect of the game. Participant 2 summed it up: "I really enjoyed playing in the game. It was really fun...it definitely got heavy at times but overall, I had a great time playing it." While the intervention is intended to address serious topics like mental health, discrimination, and stigma, the players also had the freedom to be creative and work together to solve problems. This is another potential strength of the intervention.

## **Chapter V: Conclusions and Recommendation**

### **Summary of Findings**

This study found that adapting and expanding an LGBTQ+ focused table-top RPG to an online format was feasible. The intervention was successfully delivered via Zoom to ten participants over the course of five weeks. This study also indicated that the RPG was acceptable to those participants as a group-based intervention. Qualitative data suggested that the participants thought the game successfully built coping skills and flexibility, fostered community and personal growth, provided relatable content, and was overall enjoyable. Finally, the study results showed that the intervention achieved some of the desired outcomes with potential room for improvement. Participants' resilience and coping skills significantly improved during the five weeks they participated in the intervention. In addition, anxiety and depression significantly decreased during the same time period, and perceived discrimination appeared to trend down as the study intended. Internalized stigma, however, appeared to increase, and more information is needed to determine why.

While further research is needed to further evaluate the efficacy of the intervention, this study found that adapting a LGBTQ+ focused table-top RPG to an online format has the potential to increase resilience and coping skills overall in the participants. This study and the adaptation of the intervention to LGBTQ+ youth is important in addressing the disproportionate mental health risks this population faces (Testa et al., 2015; Wadsworth & Hayes-Skelton, 2015). The intervention was adapted to this underserved population to explore the potential benefits of the online table-top RPG and how it could teach them how to overcome challenges and opposition with relevant and useful coping skills. Building these important skills helps mitigate the risk and adversity LGBTQ+ youth face in their everyday lives (Magson et al., 2021; Marks et



al., 2020). The results of this study indicated that there was a statistically significant increase in participants' coping skills and resilience after their time participating in the intervention.

In addition, the study found that anxiety and depression significantly decreased, and perceived discrimination was potentially trending in the right direction. One of the purposes of this study was to help LGBTQ+ youth build resilience and coping skills and apply them to their daily lives. As with other LGBTQ+ group interventions, (Matsuno & Israel, 2018; Wilkerson et al., 2017) this mixed-methods study results indicated that participants were building these skills, and this potentially helped them reduce the amount of anxiety and depressive symptoms, as well as cope with the discrimination they faced over the course of the intervention.

Finally, this study found that intervention was feasible and generally acceptable to participants. Like the online psychoeducation interventions by Burnes and Havanesian, (2017) this intervention was successfully adapted to and administered entirely online, and data suggests that the participants thought that the intervention was overall enjoyable and acceptable. The roleplaying aspect of the intervention was useful to participants in building important coping skills and resilience, like Daniau (2016) and Spinelli (2018) suggested in their previous studies. Participants noted that the intervention was relatable and that they felt it could be adapted to many audiences. They also expressed that it could be useful in future interventions to teach resilience and coping skills to LGBTQ+ youth.

### **Limitations**

While this study reached a variety of LGBTQ+ youth across the United States, the size of the sample was limited: fourteen participants were initially recruited and ten completed the intervention. This is a limitation to the study and a larger sample is necessary for more generalizable results. In addition, the sample was not culturally or ethnically diverse: most of the

participants identified as white and non-Hispanic. Subsequent studies would benefit from recruiting a more diverse sample to more accurately represent the population. Because of this, the study has a low generalizability and needs a broader sample to be generalizable to LGBTQ+ youth across the United States. Additionally, the pre-experimental design of this study proved to be another limitation. This study did not utilize a control group and was therefore unable to compare the results to an untreated group. A quasi- or full-experimental design could prove useful in future research to better understand the distinct effectiveness of the intervention.

The game was also only accessible to participants who had reliable high-speed broadband internet. In order to play the game, participants had to have access to Zoom so they could interact with the researcher and other players. This stipulation made it so the study excluded many marginalized individuals who do not have reliable access to such technology. The Pew Research Center (2021) has found that racial minorities and those with lower socioeconomic status (SES) are less likely to have access to broadband services in their homes. This could account for at least a portion of the lack of diversity in this study and should be addressed in subsequent research.

Finally, all of the participants had experience with table-top RPGs prior to participating in the intervention. This self-selection bias may have exaggerated the results; many of the participants had prior experience and probably already enjoyed playing these types of games. In addition, many of them were already familiar with the game mechanics and did not have to learn any of the rules beforehand, making it difficult for the researcher to determine if the intervention was accessible and particularly beginner friendly. To be truly effective, the intervention must be able to reach and engage participants without experience with table-top RPGs. As mentioned previously, RPGs can be intimidating to new players because of their expansive ruleset (Rivers et al., 2016), and this can hinder the intervention's effectiveness.

**Significance of the Study**

Individual participants had the opportunity to interact with other LGBTQ+ youth while utilizing and building their coping skills to overcome common problems. The game highlighted a number of risk factors that LGBTQ+ youth face and presented them with an opportunity to confront such perils without the potential for real-life consequences. Ideally, the ways in which they learned to overcome these obstacles are transferrable coping skills and resilience builders that they could then use to navigate similar situations in their own lives. As an added benefit, meeting and bonding with other LGBTQ+ adolescents helped the participants feel included, supported, and understood.

**Implications for Research**

The intervention preliminarily evaluated in this study aimed to reduce anxiety, depression, perceived discrimination, and internalized stigma. The study findings suggest that the intervention may have succeeded in significantly reducing anxiety and depression. This means that ideally participants took what they learned and utilized it in their daily lives when they encountered stressful situations during their time participating in the study. Perceived discrimination also seemed to decrease as a result of the intervention, although not as much as anxiety and depression. Had the intervention been longer and participants had more time to delve into this topic, findings might have achieved statistical significance.

Internalized stigma, however, increased instead of decreasing. This means that further evaluation of the intervention and its outcomes needs to be undertaken. It is unclear whether this result is because of the intervention itself and the game needs to be revised to ensure it is not harming youth, or if it is because of outside factors. More localized influences, such as participants' personal matters, could have led to this result. It could also be the product of

broadier influences such as the anti-trans legislation that is being introduced in numerous states (“Legislative Tracker,” 2021) or current dialogue surrounding trans celebrities, like Caitlyn Jenner, opposing trans girls in women’s sports (BBC News, 2021).

In a broader sense, this study informs the discipline of social work about the potential research that is still needed to utilize RPGs as a tool to build resilience and coping skills. The study provided a basic framework for subsequent studies and reinforced the feasibility of such a study. Table-top RPGs can potentially be used in an online setting to help build resilience and coping skills in minoritized populations; however, research is still needed to validate the preliminary outcomes. Because this study’s pre-experimental design was intended to assess the feasibility and acceptability of the intervention, the results do not prove that *Demons Dreamt* effectively builds resilience and coping skills while decreasing risk factors. A more rigorous quasi-experimental or full-experimental design should be utilized in future studies to evaluate the intervention.

Additionally, subsequent studies would help determine what aspects of the game are most helpful. Does the game itself provide psychoeducation for the participants to improve their coping skills? Did the positive interaction with LGBTQ+ peers increase resilience? Are the effects of this intervention long-term, or could a longer intervention produce more long-lasting improvements? Does the therapeutic alliance between the individual running the game and the participants have any bearing on the intervention’s effectiveness? These are some of the questions that need further researching to help researchers understand the applications of this intervention.

### **Implications for Practice**

There are a few different implications for practice. Firstly, this study shows that there is potential for online table-top RPGs to be used as effective tools in psychoeducational and therapeutic practice within the field of social work. The intervention is engaging and has the potential to reach many people across the US—while still being relevant, relatable, and useful. The COVID-19 pandemic created numerous barriers to working service users in person (Magson et al., 2021), but this intervention provided resources and general information about mental health and coping skills to a small group of LGBTQ+ youth across the US.

This study also demonstrates that the intervention can be used to help players learn necessary coping skills and build effective resilience in participants by teaching them how to overcome challenges in a safe environment. This intervention can help participants explore and grow in their own identity as well as build upon these skills. Modified to the participants, online table-top RPGs can potentially help players learn relevant skills and techniques to overcome challenges while also providing a safe place to explore and grow these skills.

### **Recommendations**

While more research is needed to validate the outcomes, this pilot study confirmed that there is potential for online table-top RPGs to reach a wide audience and help reduce risk factors while building resilience in minoritized populations. Investing in research on this topic could benefit the field of social work by providing practitioners with a way to better engage with and help minoritized populations. The intervention proved it was feasible to access and engage this population in an online format and help them build resilience and coping skills even during the pandemic.

In addition, the field of social work could benefit from this intervention and subsequent studies to evaluate its usefulness with other populations. While the roleplaying game aspect of

the intervention is appealing to youth, it could be adapted to identify and focus on the struggles of adults and older adults. Alternatively, the intervention could be adapted to focus on the struggles of Black and Indigenous people of color (BIPOC) or other minoritized populations to help address their struggles and how they can overcome them.

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